

patients with moderate use of alcohol had 23.8% lower risk of all-cause death ($p<.00016$) and a 25.8% lower risk of CV-death ($p<.00017$) than non-users. There was no significant difference between non-drinkers and heavy-drinkers with regard to survival following adjustment for age and smoking status.

Alcohol use at baseline and survival compared to non-users (HR=hazard ratio)

Alcohol use (drinks/week)	1-7	>7
All-cause mortality, unadjusted (n=946)	HR 0.58 (0.51-0.66; $p<.00001$)	HR 0.63 (0.50-0.80; $p<.00015$)
All-cause mortality, adjusted for age and smoking status	HR 0.76 (0.66-0.88; $p<.00016$)	HR 1.01 (0.79-1.29; $p<.93$)
CV-mortality, unadjusted (n=783)	HR 0.56 (0.48-0.65; $p<.00001$)	HR 0.60 (0.46-0.78; $p<.00015$)
CV-mortality, adjusted for age and smoking status	HR 0.74 (0.64-0.87; $p<.00017$)	HR 0.97 (0.74-1.28; $p<.85$)

Conclusion: Our results demonstrate a positive and strong association between moderate alcohol use and survival in a cohort of patients following complicated MI.

1153-74

Physician Counseling Can Influence Health-Related Quality of Life

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Background: Secondary prevention counseling (SPC) by physicians (MDs) is a vital component of guidelines-based care after hospitalization for coronary artery disease (CAD). Yet, there is limited evidence of its benefits on patient (pt) well-being. Among 1298 members of two not-for-profit managed care organizations, we evaluated the relationship between reported SPC and self-rated health improvement following a CAD hospitalization. **Methods:** All pts were surveyed approximately 9 months after a hospitalization for unstable angina, myocardial infarction, percutaneous intervention, or coronary artery bypass surgery. Health-status was assessed using the SF-36 Reported Health Transition scale. **Results:** One quarter (28%) of all pts reported feeling "much better" compared to the previous year. Compared to others, pts were more likely to feel much better if they reported SPC about management of chest pain (29% vs 23%), cholesterol (30% vs 20%), blood pressure (29% vs 22%), and diabetes (30% vs 25%), as well as exercise advice (30% vs 18%), heart attack symptoms (29% vs 25%), and when to go to the emergency room (29% vs 25%). A dramatic gradient in well-being was observed according to respondent ratings of whether the MD was easy to understand: strongly agree (35% much better), agree (20%), not sure (13%), disagree (8%), strongly disagree (11%). In stepwise logistic regression, after controlling for the reason for hospitalization, significant predictors of feeling much better were understandable MD language ($p<0.0001$), review of symptoms of a heart attack ($p=.003$), and advice on cholesterol control ($p=.03$) and exercise ($p=.03$). **Conclusion:** Comprehensive SPC in understandable language has a demonstrable effect on a patient's sense of well-being. As a component of quality healthcare, the importance of these interactions on the overall health of pts should not be underestimated.

1153-75

Physician Beliefs About the Treatment of Hyperlipidemia and Treatment to National Cholesterol Education Program Low-Density-Lipoprotein Cholesterol Goal in High-Risk Patients

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Background: Many high-risk patients do not receive therapy that is sufficiently aggressive to achieve LDL-C goal. This study describes the relationships between physician beliefs and statin treatment decisions for high-risk patients. **Methods:** A cross-sectional study of 108 physicians and 1,187 statin-treated patients with a NCEP LDL-C goal <100 mg/dL was conducted in 2002. Physicians completed a survey prior to enrolling patients. Treatment history was collected from a chart review. Beliefs were measured using validated scales with a 5-point scale. Patient follow-up was categorized into changes that increased or decreased a patient's chance of goal attainment. The relationships between physician beliefs and type of follow-up change were analyzed using multivariate GEE models to account for physician effect, controlling for patient characteristics. Odds ratios (95% CI) are reported. **Results:** The majority of physicians were in internal medicine (51%) or general practice (38%). Mean patient age was 65.8 (SD 10.6) and 56% were male. Mean pre-treatment LDL was 154.5 (SD 43.8). On average, physicians treated these patients for 3.5 years. Although 75% of physicians agree with guidelines that close enough to goal is not good enough, 43% of these high-risk patients were not at LDL-C goal and 35% who were not at goal with initial therapy were either down-titrated, had no change in therapy or had an ambiguous change. Mean follow-up LDL was 122.8 (SD 24.2) for those not at goal. 70% of physicians did not believe treating to goal was an urgent need. Physician beliefs associated with a decreased chance of goal attainment at follow-up included risks associated with titrating a statin (OR: 1.70; 1.13 – 2.56), getting patients within 10 or 20 points of goal is close enough (OR: 1.83; 1.24 – 2.69) and current statin therapies are not effective for getting patients to goal (OR: 4.76; 3.03 – 7.46). **Conclusions:** While most physicians agree with current treatment guidelines, their beliefs about statins and the urgency of treating hyperlipidemia may act as barriers to treating patients to goal. Programs such as NCEP should incorporate information on physician beliefs to further improve patient outcomes in clinical practice.

1153-76

Engaging Personal Physicians as Study Investigators: Can It Enhance Patient Enrollment in Clinical Trials?

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Background: Limited enrollment in clinical trials obscures significant findings, wastes resources, and unnecessarily exposes participating patients to harm. Evaluating ways to improve enrollment, we asked whether patients would be more willing to participate (WTP) in a cardiovascular drug trial if their personal rather than an unfamiliar physician was engaged as the study investigator. **Methods:** We approached 1440 randomly selected patients from 13 Maryland-based outpatient cardiology and general medicine clinics to complete an 80-item self-administered questionnaire. Respondents read a 1-page trial description and reported their WTP using a 5-point Likert response scale. We then asked respondents their WTP if their personal rather than an unfamiliar physician was the study investigator. Patients rated trust in physicians and quality of their health care experiences, to assess the importance of these factors to explain any differences in WTP between personal and unfamiliar physician. **Results:** Of 1132 patients eligible, 789 (70%) patients responded. Including only those with a personal physician and complete data (n=666), patients were mean (sd) aged 55 (15) years, 53% female, and 33% black. Patients were "very likely/likely" to participate in the study 56% of the time if conducted by their personal compared to only 36% if by an unfamiliar physician ($p<0.0001$). After adjusting for age, race, gender, and socioeconomic and health status, only presence of a family member or friend in health care was positively associated with "very likely/likely" WTP with unfamiliar physician (OR, 95% CI = 1.42, 0.99-2.03). If by a personal physician, however, trust in physician (1.57, 1.16-2.11, per 1/5 unit increase), rating of health care quality (1.18, 1.06-1.31, per 1/10 unit increase), and having a family member or friend in health care (1.57, 1.16-2.11) were important predictors of WTP. **Conclusion:** Patients are much more likely to enroll in a clinical trial if their personal physician is engaged as a study investigator. Greater enrollment through use of personal physicians could relate to the importance of communication, trust, and familiarity with the health system in patients' participation decisions.

ORAL CONTRIBUTIONS

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Outcomes Research With Implications for Policy and Practice

Tuesday, March 09, 2004, 2:00 p.m.-3:30 p.m.
Morial Convention Center, Room 265

2:00 p.m.

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Volume-Based Referral for Coronary Artery Bypass Graft Surgery and Percutaneous Coronary Intervention: Is the Volume Juice Worth the Squeeze?

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Background: Hospital volume minimums for coronary bypass graft (CABG) and percutaneous coronary intervention (PCI) have been advocated to reduce mortality. The number of patients affected and lives saved by adopting volume minimums is unknown. **Methods:** Using data from the 1998-2001 Nationwide Inpatient Sample, an administrative database of discharges from a sample of US hospitals, we classified hospitals as low volume hospitals (LVHs) if they did not meet annual procedure volume minimums recommended by the Leapfrog Group (CABG 450 cases, PCI 400 cases); all other hospitals were considered high volume (HVH). Multivariable logistic regression analyses were used to evaluate the independent association between hospital volume and in-hospital mortality adjusting for patient factors. Lives saved by the adoption of hospital volume minimums were estimated by predicting mortality assuming all LVH patients were instead treated at HVHs. **Results:** Patients at LVHs had a higher crude in-hospital mortality rate for CABG (3.85% vs. 3.51% HVH, $P=0.015$) and PCI (1.96% vs. 1.43%, $P<0.001$). Odds of in-hospital mortality remained higher for patients treated at LVHs for CABG (OR 1.16, 95% CI 1.09-1.23) and PCI (OR 1.12, 95% CI 1.05-1.20) after multivariable adjustment. Treating all US patients at HVHs would require moving 143,687 CABG cases and 87,661 PCI cases from LVHs each year. Based on the association of volume and mortality and assuming that the mortality risk for transferred patients would be comparable to that of patients currently treated at HVHs, moving LVH cases to HVHs would save an estimated 625 lives annually among CABG patients and 109 lives annually among PCI patients. Averting a single volume-associated death for CABG patients would require treating 230 patients at HVHs instead of LVHs, while 805 PCI patients would have to be treated at HVHs instead of LVHs to avert one volume-associated death annually. **Conclusion:** Applying hospital volume-based minimums for CABG and PCI in the US would require moving 231,348 cases annually from LVHs to HVHs and, in the most optimistic case, result in 1,035 fewer deaths. The feasibility and costs of such a volume-based referral policy are unknown.